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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/819,990	03/29/2001	Isao Minematsu	57454-060	3710

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EXAMINER	
PAN, DANIEL H	

ART UNIT	PAPER NUMBER
2183	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/819,990

Applicant(s)

MINEMATSU, ISAO

Examiner

Daniel Pan

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 11-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 1-10 remain for examination. Claims 11-14 have been canceled (correction included).

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

3. As to the applicant's remark that pop and pop ra in fig.9 is a single instruction code and has only a single operation code, the pop instruction has only one operation. No description of the data transfer between the registers and memory corresponding to the single instruction code having single operating code can be found in the specification. Although the pop is a single operation code, it has no data transfer between the registers and the data transfer between one of the registers and memory based on a single pop. Therefore, it raised a doubt as whether applicant had possession of the claimed subject matter at the time of the filing.

4. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The Claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

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which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant's specification, page 12, lines 3-12, fig.9A, taught a single instruction code POP instruction with two operational codes (pop(1) with no register and pop(2) with a register as shown in fig.9A). However, claim 1 is directed to the data-transfers in correspondence to single instruction code having a single operation code (see claim 1, lines 7-9).

5. As to applicant's remarks regarding the pop and pop ra as single operation code, it only has the data transfer between registers, not data transfer between one of the registers and the memory. No teaching of how the data transfer is implemented between registers and data transfer between one of the registers and memory corresponding to the single instruction code having single operation code can be found in the specification. Therefore, the enablement is not satisfactorily resolved, and consequently raised a doubt as to the enablement (see 858 F.2d 731,737 8 USPQ2d 1400, 1404 (Fed. Cir. 1998), see also MPEP 21654.01,2164.04).

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Col et al. (6,349,383) in view of volentine et al. (6,363,473).

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mandavilli (6,546,480) in view of Morrison et al. (5,918,031).

8. The rejections are maintained and incorporated by reference the last Office action on 11/17/06.

The response filed 05/16/07 by applicant has been fully considered but is not persuasive.

9. In the remarks, applicant argued that :

a) the claimed invention requires both data transfers to be performed in correspondence to the same instruction code;

b) Morrison disclosed a data transfer between a register and memory in response to a single instruction code, and Mandavilli disclosed a data transfer between registers in response to another instruction code.

10. As to a) applicant is reminded that applicant is reminded that unclaimed features cannot be used to overcome the prior art (e.g. see CCPA In re Lundenberg & Zuschlag, 113, USPQ 530, 534 (1957)). For example, applicant only claimed "an instruction code" (claim 1, line 2) and single said instruction code (claim 1, line 9), not the same instruction code. Therefore, single said instruction code could be the instruction code not necessarily the same instruction code. Nevertheless, let's assume it is the same instruction code, Col disclosed a data transfer between registers and memory in response to one instruction code, and Volentine taught a data transfer between registers in response to another instruction code (see [SPUSH MACRO REG1] in co1.11, lines 10-25) having a single operation code [SPUSH] for transferring between registers (see the move of content of REG1 to bp register in co1.11, line 15, see also 8 [314]). Col did not specifically show the data transfer between registers as claimed. However, it would have been obvious to one of ordinary skill in the art to use Volentine in Col for including the data transfer between registers as claimed because the use of Volentine could provide Col the capability to generate more than one operations in a single predefined instruction code, therefore, reducing the overall latency of the complex instructions, and therefore, provided a solution to a particular problem, and it could be achieved by predefining the Volentine's single instruction for transfer between the registers into the configuration file of Col with modified system parameters (e.g. the instruction type, code length) so that the specific transfer instruction of Volentine could be recognized by Col, and because Col also taught that the future improvement was to include a microinstruction which directed the microprocessor to access a single cache

line during a single instruction cycle to access multiple prescribed data entities (see col.21, lines 40-46), which was a suggestion of the applicability of the data transfer between registers and a memory in addition to the data transfer between the registers in a single instruction, in doing so, provided a motivation.

11. Furthermore, since applicant did not claim the specific format or the structure of the single instruction code, examiner hold that one of ordinary skill in the art should be able to recognize the advantage of using a single instruction code in general for multiple transfers in order minimize the hardware overheads. The question to be asked is : "What is the uniqueness of multiple transfers (registers and register and memory) based on a single instruction code in which no specific instruction format of the single instruction code has been claimed ?"

12. As to b), since applicant did not claim the format or the structure of the single instruction code, examiner hold that one of ordinary skill in the art should be able to recognize the advantage of using a single instruction code for multiple transfers in general in order minimize the hardware overheads. See also pages 7, 8 of the last office action for reasons of obviousness.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Pan whose telephone number is 571 272 4172.

The examiner can normally be reached on M-F from 8:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chan, can be reached on 571 272 4162. The fax phone number for the organization where this application or proceeding is assigned is 703 306 5404.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

21 Century Strategic Plan

DANIEL H. PAN
PRIMARY EXAMINER
GROUP